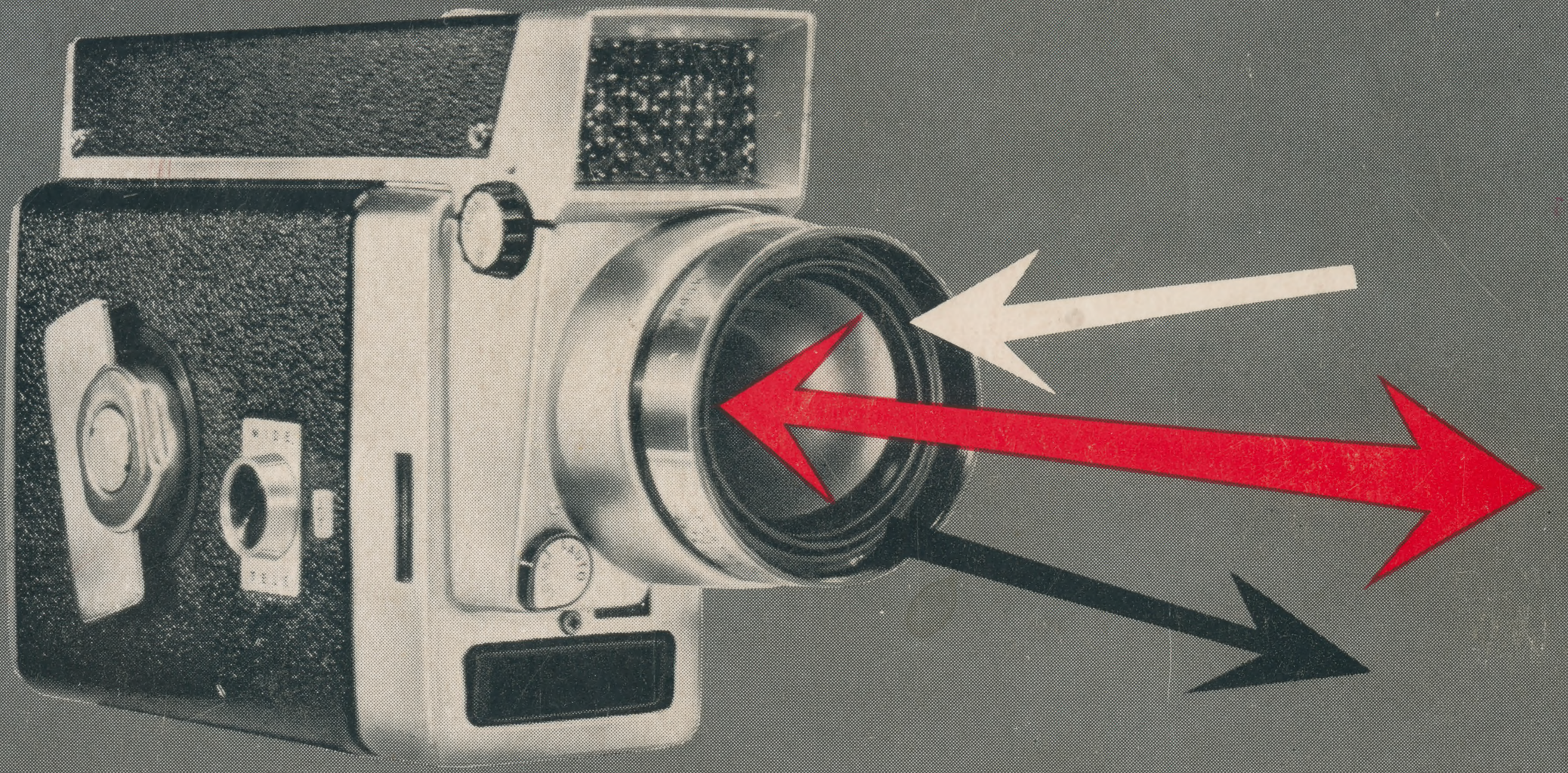


KODAK ZOOM 8 REFLEX CAMERA

AUTOMATIC f/1.9

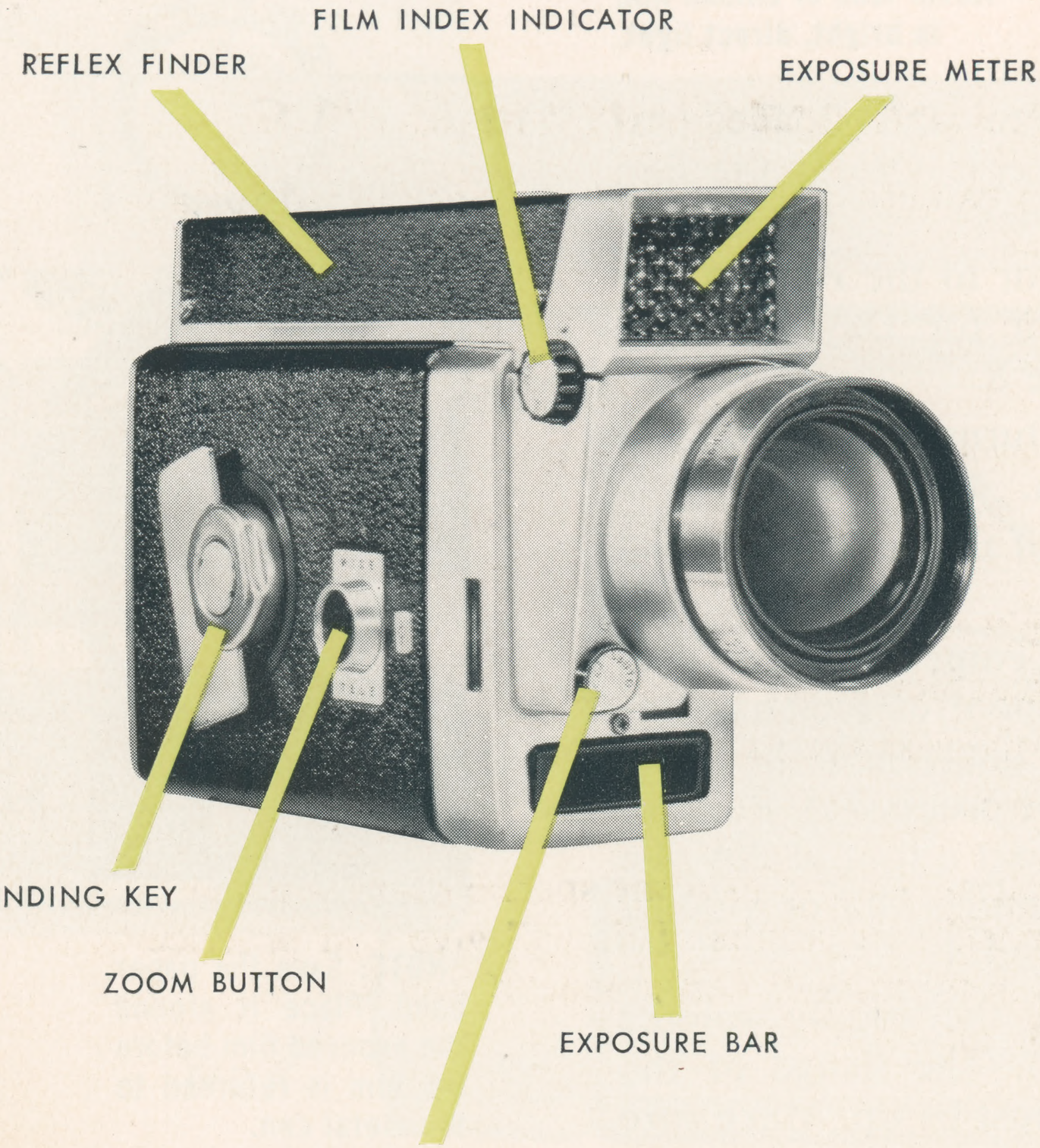
Kodak Zoom 8 Reflex Camera (Automatic *f*/1.9)

A truly remarkable 8mm roll-film camera . . . designed and engineered for automatic moviemaking.

Here are but a few of its features:

- Coupled zoom reflex finder lets you see exactly what will be recorded on the film.
- Fully automatic exposure meter control with manual lock.
- A Kodak Zoom Lens ready to do your bidding – be it wide-angle, normal, or telephoto pictures.
- A choice of manual zoom or power zoom.
- Finder tells when light level is insufficient for picturetaking.
- Adjustable eyepiece to meet individual eye requirements.
- Automatic-reset footage indicator.

Before making any important pictures – a trip or some special event – it's always well to shoot a roll of film and check the results. This will give you practice in camera operation and provide a check on your equipment. If you have any questions, your dealer will be glad to help.



Kodak 8mm Movie Films

Movies in full color are easy to make. Two types of Kodachrome Color Movie Film are available:

Kodachrome Color Movie Film for Daylight reproduces colors with startling realism when exposed under daylight conditions.

Kodachrome Color Movie Film, Type A, for Photoflood Light, is color balanced for photoflood lamps and requires no filter with these lamps. This film can also be used for taking pictures in daylight when a Kodak Daylight Filter for Kodak Type A Color Film is used.

NOTE: Each roll of film has additional footage for loading and processing purposes. This is removed at the laboratory before the film has been processed. Therefore, **when loading your camera, use the amount of film specified in the loading instructions.** Film exposed in your camera will be returned as a 50-foot roll, ready for projection.

Never load in direct sunlight.

LOADING

Never load or unload film in bright, direct light.

The Kodak Zoom 8 Reflex Camera can be loaded easily by following these simple steps: (Note: the film must follow the arrowed guidelines.)

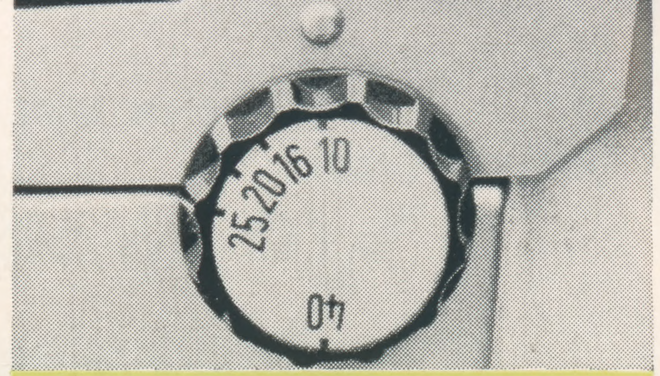
1. Rotate the film index indicator to the **red 10,** for Kodachrome Color Movie Film for Daylight – for films with other indexes see page 8.

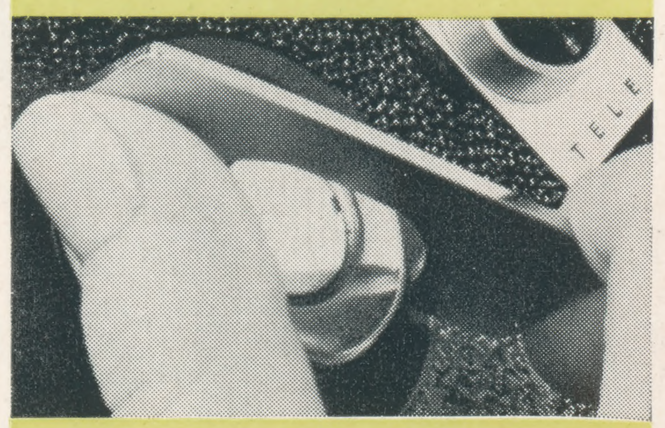
2. Give the winding key a few turns. Never load the camera if the motor is run-down.

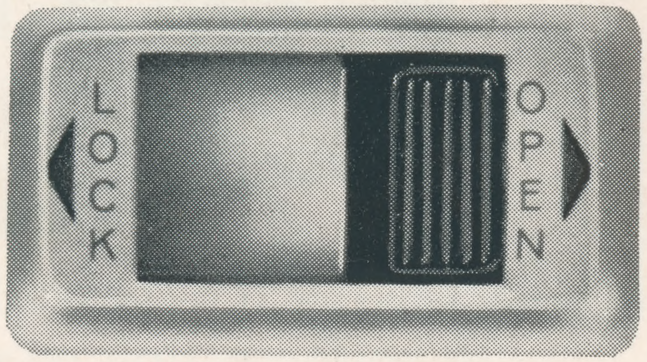
3. Press in the knurled section of the cover latch and slide the latch to OPEN.

4. Lift off the cover. Take the empty take-up spool out of the camera. Remove a spool of Kodachrome Color Movie Film from its container. Save the metal can to use in returning the film for processing. Remove the paper band* and pull out about a foot of film. Be especially careful not to let too much film unwind or the film on the spool will be fogged.

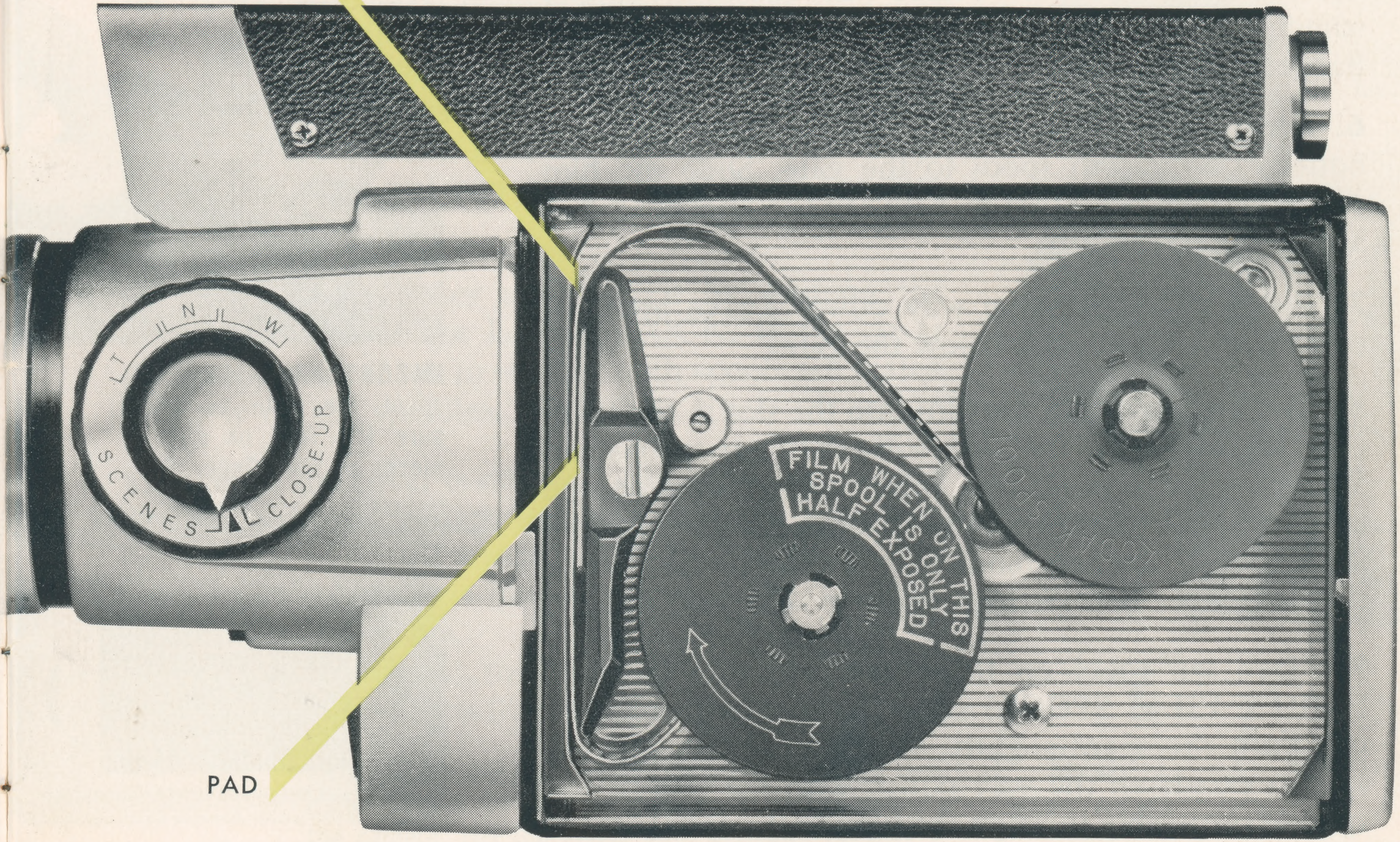
5. Place the spool of film on the supply spindle (marked FULL FILM SPOOL). The flange of the spool stamped "Kodak Spool" must be up. Make sure







***NOTE:** Save the paper band. Place it around the exposed film before the film is returned to the metal can.


APERTURE PLATE
PAD
SCENES
CLOSE-UP
FILM WHEN ON THIS SPOOL IS ONLY HALF EXPOSED

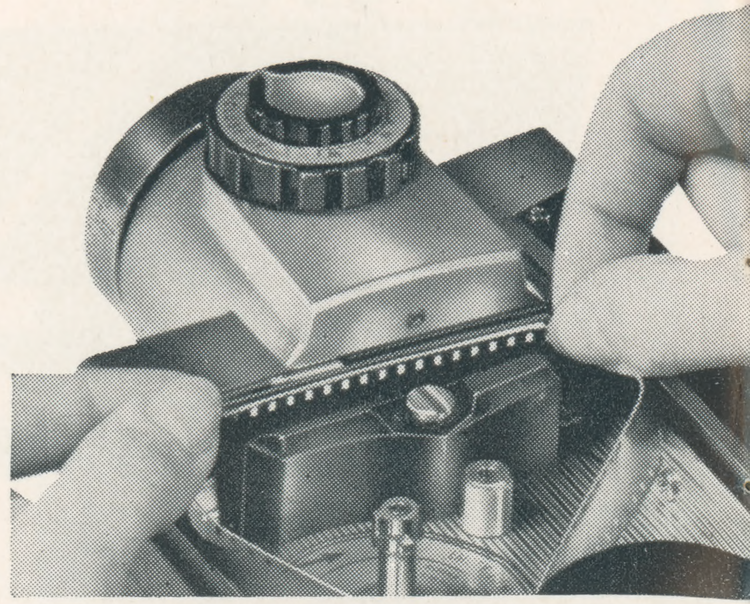
that the spool is properly seated—the end of the supply spindle should project through the hole in the spool flange.

6. Let the film follow the line with the arrow from the bottom of the film spool to the gate. Slide the film down into the gate; that is, between the PRESSURE PAD and APERTURE PLATE.

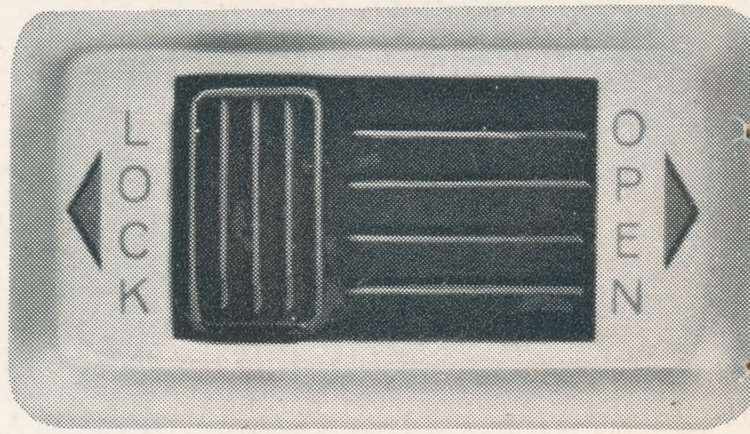
7. Push the film all the way down. Leave approximately 6 inches of film below the gate.

8. Thread the end of the film into the slot in the take-up spool core, on the side with the instructions up. Then wind the slack film, black side out, onto the take-up spool by turning the spool in the direction of the arrow. If the film binds between the spool flanges, the flanges are bent; straighten them with your fingers.

9. Place the spool on the take-up spindle (marked EMPTY FILM SPOOL) so that the instructions are up. Turn the spool slightly, if necessary, so that the spool extends all the way down, with the end of the spindle projecting through the hole in the spool.



IMPORTANT: Always inspect the gate to make sure it's free of dirt or pieces of film. Page 20.

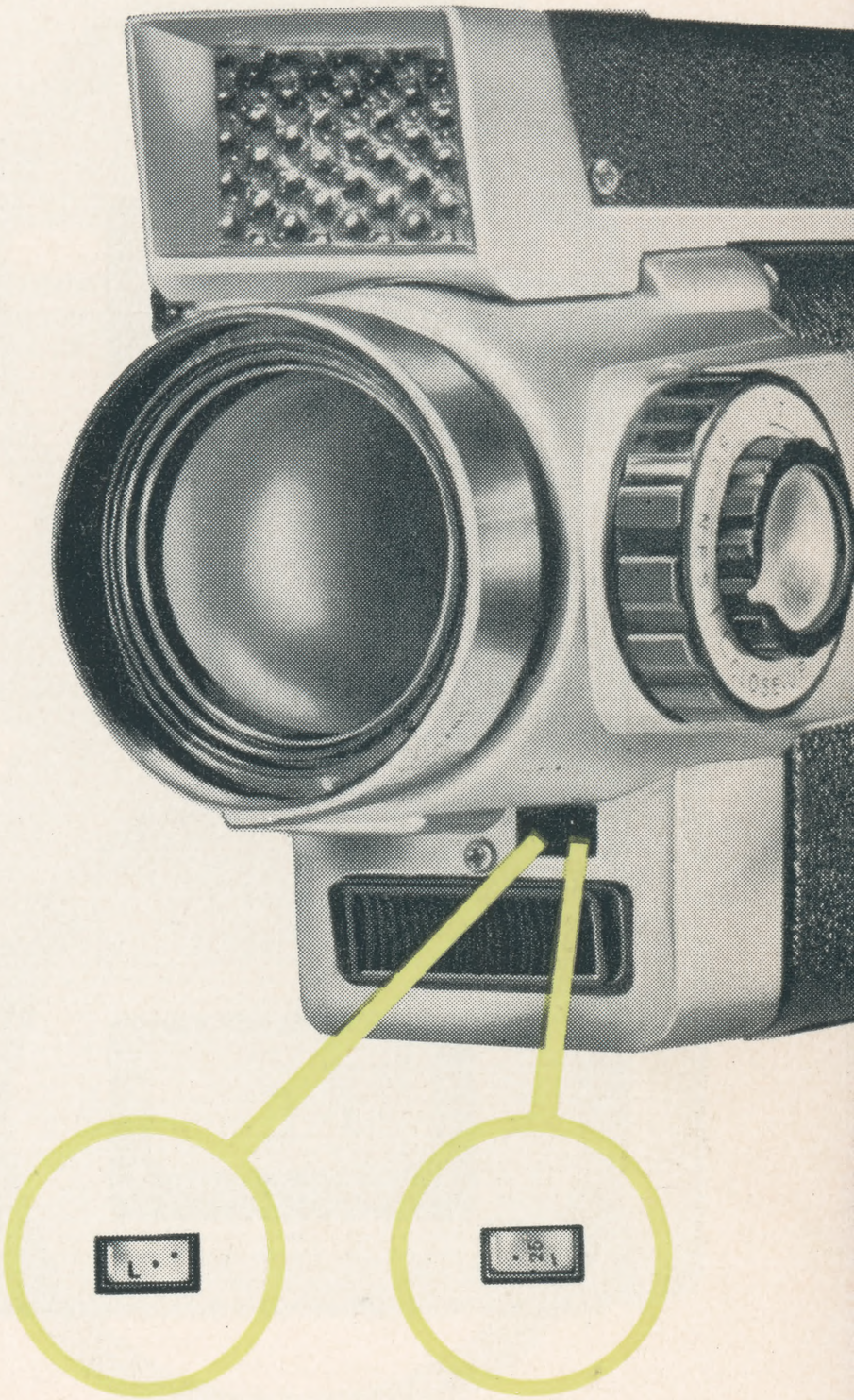


10. After you have loaded your camera, *turn the take-up spool with your finger in the direction of the arrow, until the film appears snug on the reel.* Check the film flow by pressing the exposure bar to advance 1 or 2 inches of film; no slack film should build up. If the film does not run correctly, recheck the film threading.

11. Replace the cover and lock it by pushing the knurled section of the latch to LOCK. If the cover does not go on, check to see that both spools are seated properly on the spindles.

12. When the cover is on and locked, the L (meaning "loaded") on the footage indicator dial will appear in the footage indicator window. Hold the exposure bar down until the footage indicator dial shows 25. Now you can take pictures.

As you take pictures, the footage indicator dial turns to show you how much film is yet to be exposed.



CAUTION: Do not take movies before the footage indicator reaches 25 or after it shows 0. Before opening the camera, run the motor until indicator reaches E.

UNLOADING

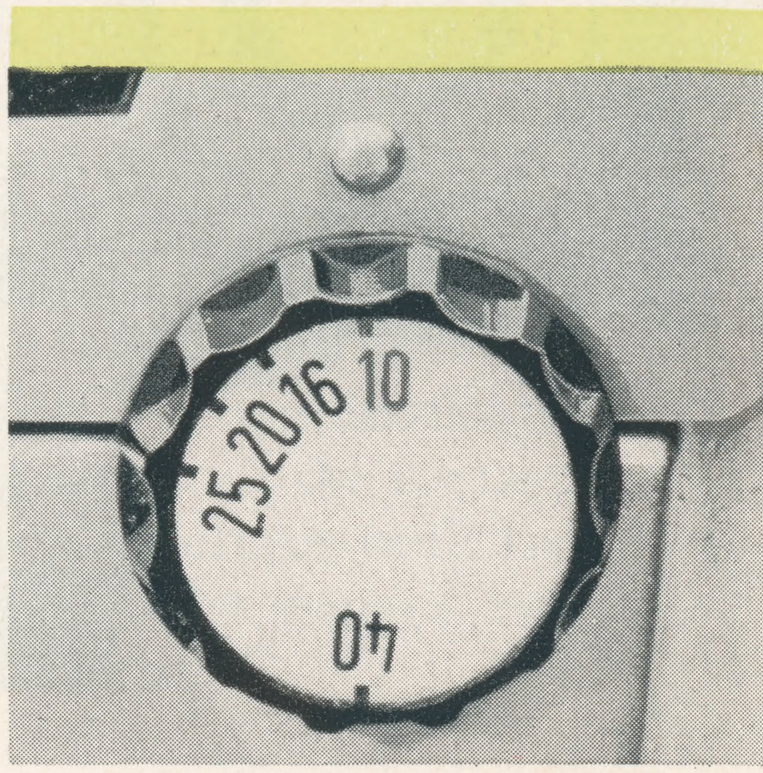
When the film has been run through the camera for the second time, hold the exposure bar down until the footage indicator reads E. Remove the full spool of film. Place the paper band around the film and place the film in the metal container.

You can have your film processed as follows: (1) take exposed film to your dealer, who will arrange for processing (specify the processor, if you desire), or (2) mail the exposed film directly to a Kodak Laboratory (as described below) or to any laboratory that offers such a processing service.

To mail your film to a Kodak Laboratory, first purchase a Kodak Prepaid Processing Mailer, PK59, from your dealer. Then, following carefully the instructions on the Mailer, send the exposed film directly to a Kodak Laboratory. After processing your film, the laboratory will mail it directly to you.

FILM INDEX

The film indexes which appear on the camera are: 10, 16, 20, 25 and 40. In daylight, 10 is the index,

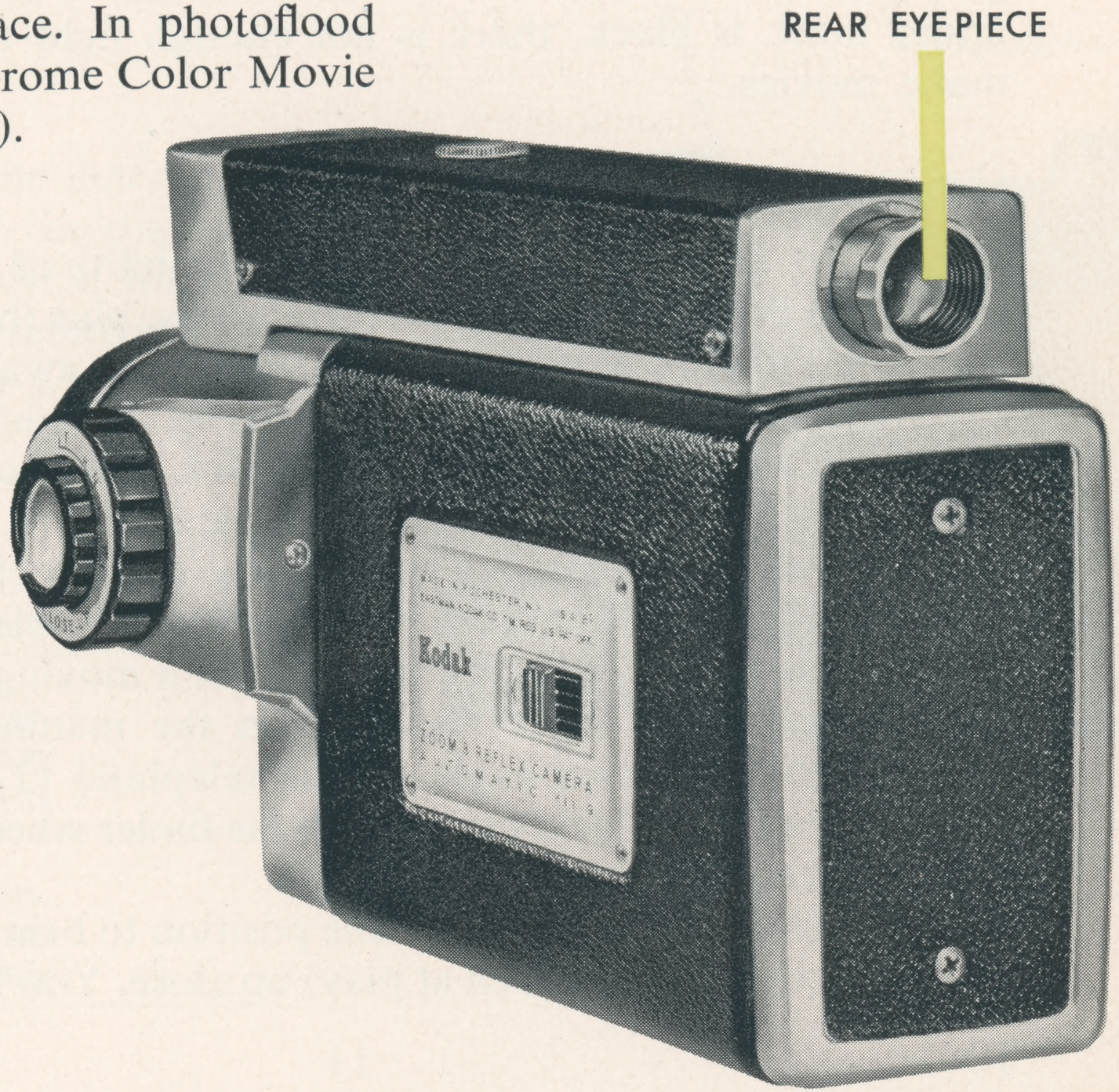


both for Kodachrome Color Movie Film for Daylight; and for Kodachrome Color Movie Film, Type A, with the Kodak Daylight Filter for Kodak Type A Color Films (No. 85) in place. In photoflood light, 16 is the index for Kodachrome Color Movie Film, Type A (no filter required).

REFLEX FINDER

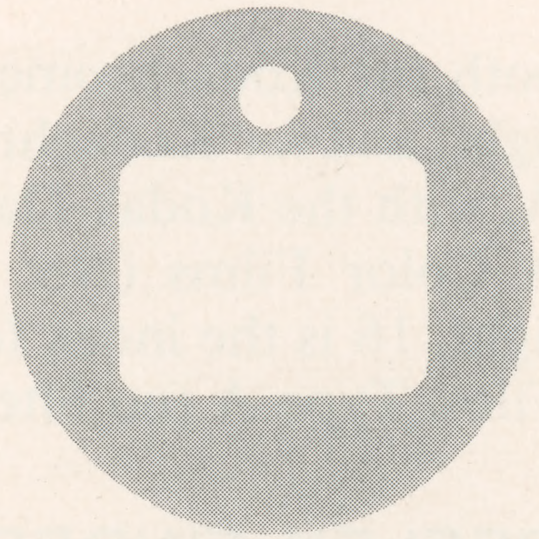
The reflex finder is a telescopic-type finder. Adjust the finder to your type of vision by rotating the REAR EYEPIECE until the image is sharp. It need not be refocused.

The reflex finder lets you see exactly what will be recorded on the film because you look right through the lens to center the subject. To use the finder for titling and extreme close-ups, see pages 19 and 20.



INSUFFICIENT LIGHT

Aim the camera at the subject you wish to photograph. If the small round spot located above the finder mask is black, there is not enough light to make movies.



KODAK ZOOM LENS

The Kodak Zoom Lens gives you the flexibility of a single lens doing the work of several lenses, plus the additional feature of being able to zoom in or away from the subject you are photographing. Turning the manual zoom knob gives you a quick choice of wide-angle, normal, or telephoto pictures.

If you want a moving-away-from-the-subject effect, slowly turn the manual zoom knob from telephoto (T) to wide-angle (W); if you want a moving-toward-the-subject effect, slowly turn the manual zoom knob from wide-angle (W) to telephoto (T). Always keep the subject centered in the finder when using the zoom feature.

You'll use the telephoto (T) lens position to bring distant scenes (like children at play) up close. You'll



use the wide-angle (W) lens position for pictures of groups of people in the home and majestic scenes outdoors. The normal (N) lens position is used for average picture-taking situations.

FOCUSING

For most picture-taking, rotate the inner knob until the pointer-shaped portion of the dial is at the red arrow ▲. The lens has provision for focusing for SCENES and CLOSE-UPS. The tables below show the focusing position to be used with subject distances for best results.

T

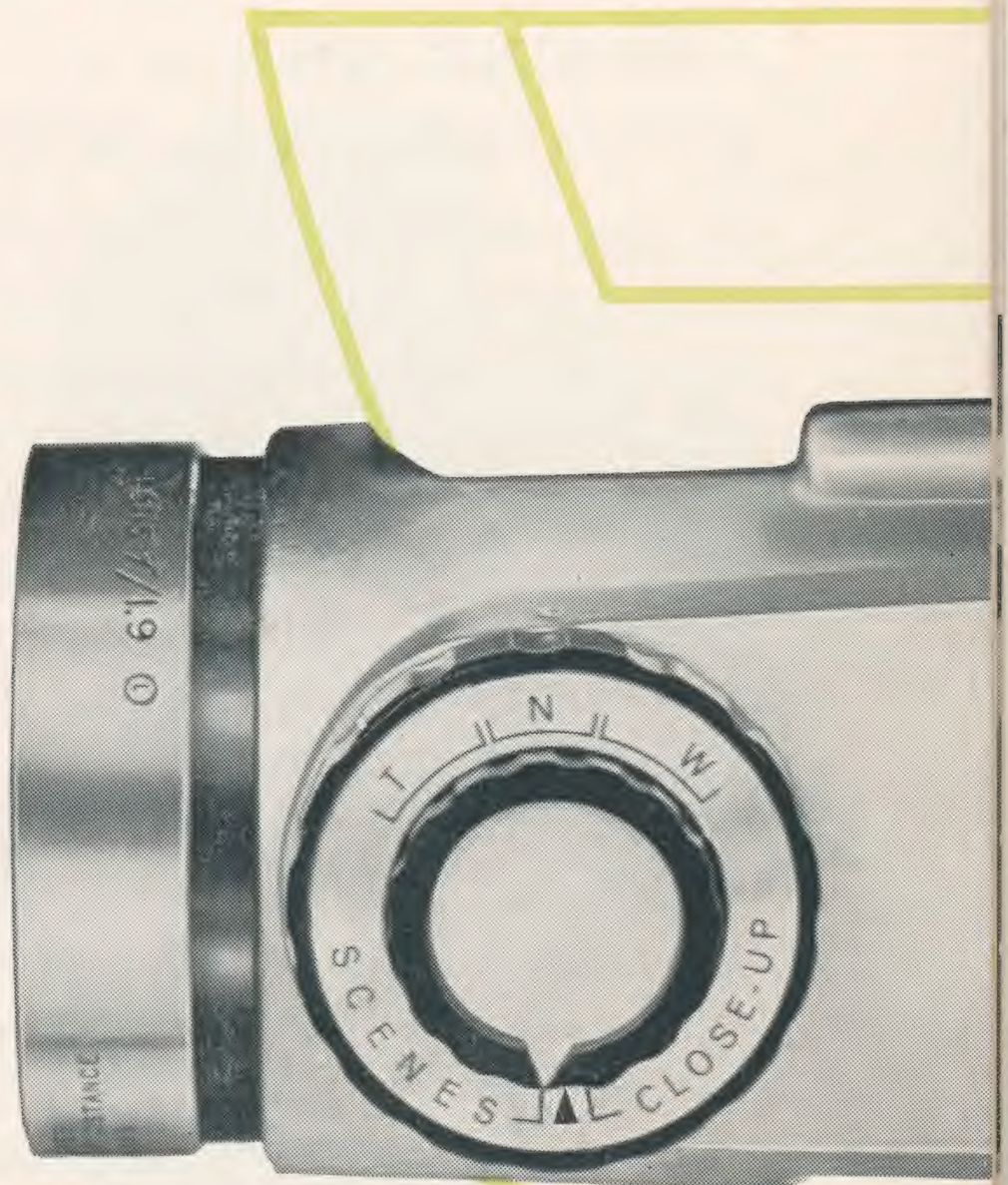
	Close-Up	▲	Scenes
Poor light	9 to 15 feet	15 to 35 feet	35 feet to Infinity
Bright sun	6 to 50 feet	9 feet to Infinity	15 feet to Infinity

N

	In All Positions
Poor light	9 feet to Infinity
Bright sun	4 feet to Infinity

W

	In All Positions
Poor light	5 feet to Infinity
Bright sun	2 feet to Infinity



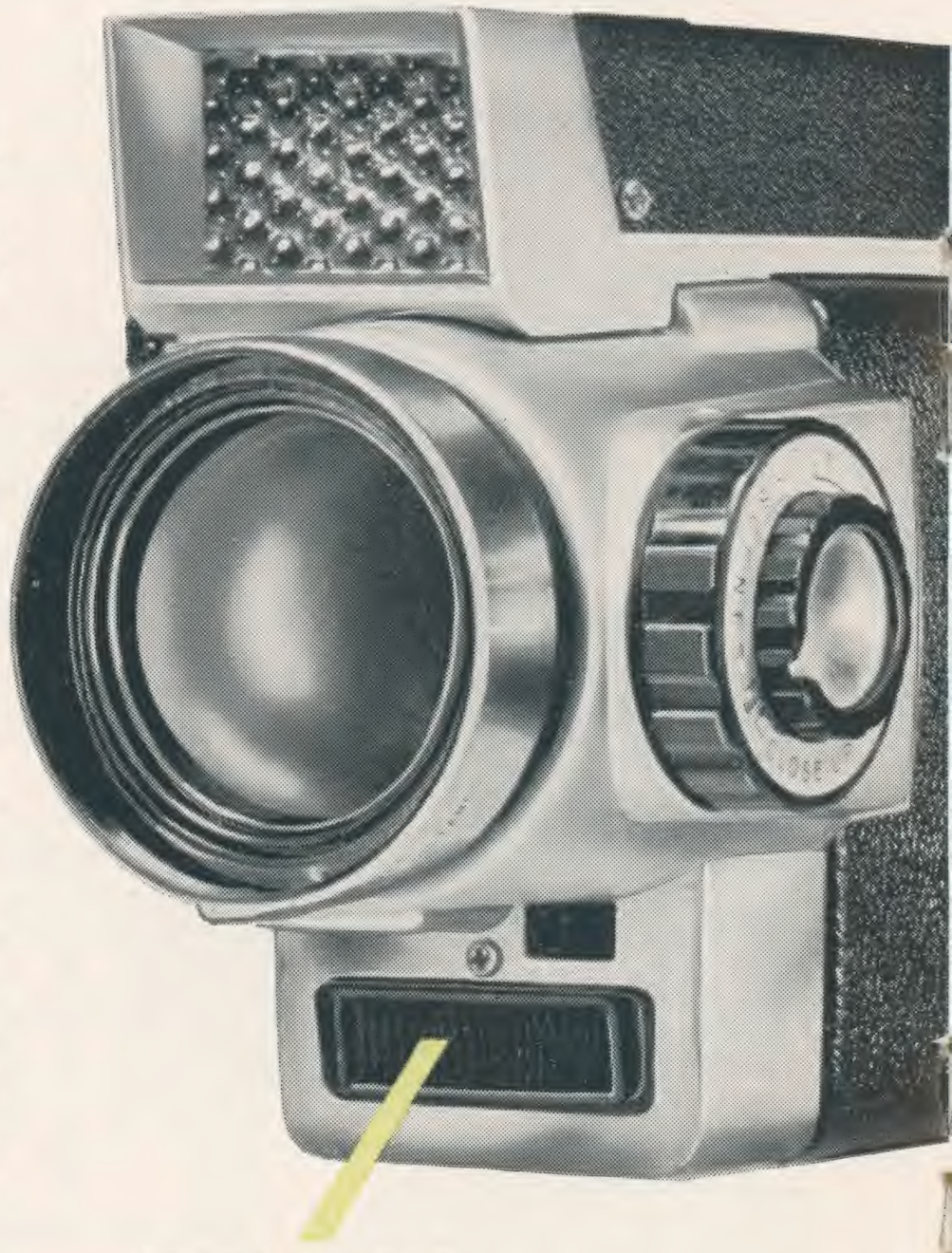
WINDING AND STARTING THE MOTOR

Be sure the EXPOSURE BAR is not locked in the running position. Lift the winding key and turn it clockwise until the spring is wound tightly. Fold the key flat against the camera; otherwise it will turn.

To start the motor of your camera, push in the exposure bar. To stop the motor, release the bar. When you press the exposure bar or release it, avoid moving the camera. Such motion will cause unsteady pictures when they are projected on a screen.

For short runs, push in the exposure bar. For continuous running, push the bar inward and toward the manual-zoom-knob side of the camera.

If you want to get into the picture yourself, mount the camera on a tripod or other firm support; push in the exposure bar and slide it toward the manual-zoom-knob side of the camera to allow the motor to run continuously. To stop the motor, slide the exposure bar away from the manual-knob side of the camera and release the bar.



EXPOSURE BAR

OPERATING

Check to be sure that the film index indicator is at the proper setting and that the exposure-control lock is on AUTO.

Hold your camera steady and make no sudden movements while you are taking pictures. Grasp the camera firmly with both hands and brace your elbows against your body. The exposure bar can be operated with a finger of either hand. The button within the power zoom slide can also be used to operate the camera, see page 14.

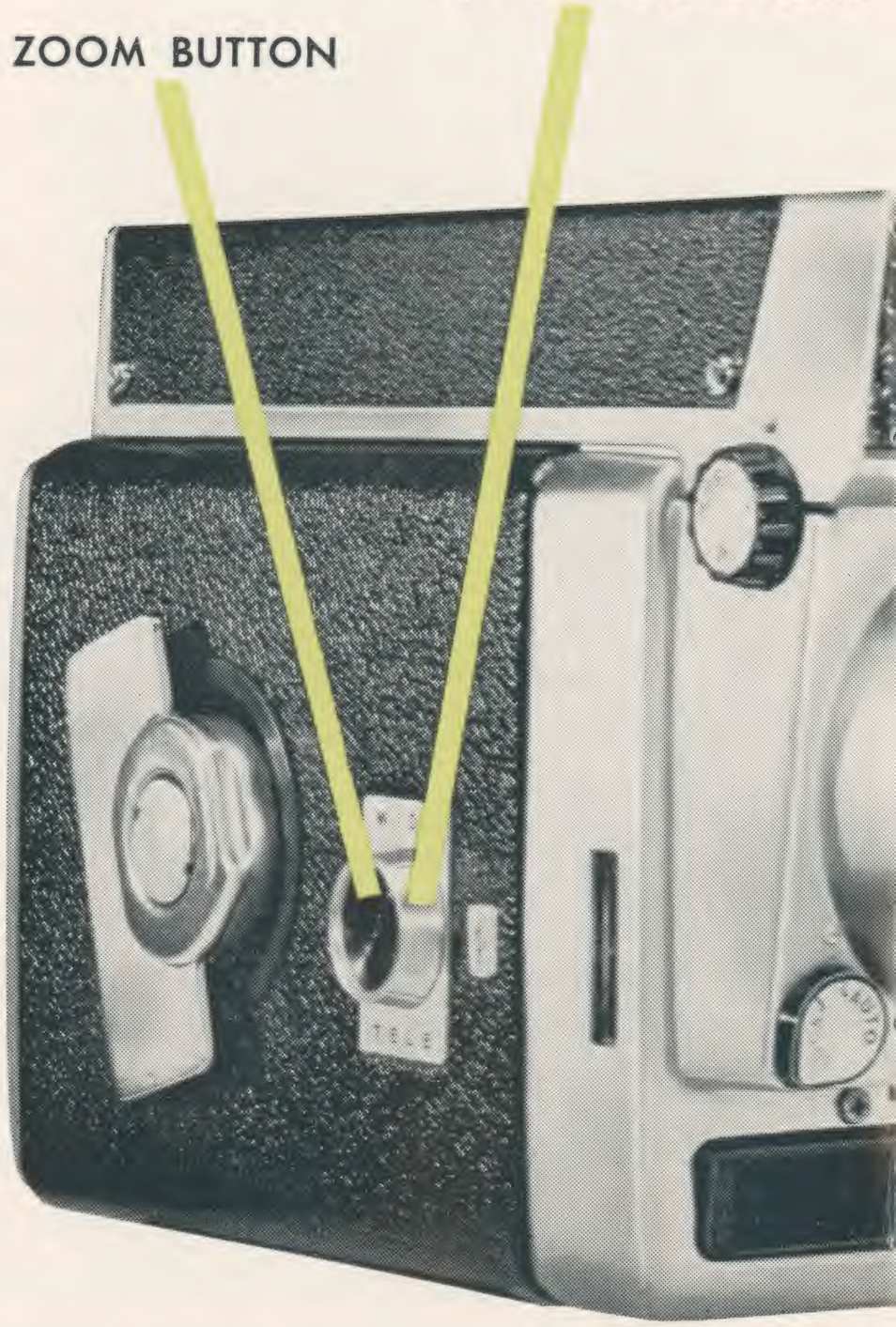
Before each scene, check the setting of the film index indicator, make sure the motor is wound and that there is sufficient light to make movies; then press the exposure bar to take the picture.

Steadiness is of greatest importance when you are making movies. Any unsteadiness while taking the pictures will be greatly accentuated when the film is projected. Unsteadiness should be avoided when zooming, especially in the telephoto position. For steadiest pictures, mount your camera on a tripod or some other firm support. A tripod socket is built into the base of the camera.



POWER ZOOM

Start the film in motion by pressing on the ZOOM BUTTON within the POWER ZOOM SLIDE; at the same time, push the slide up (WIDE) to go from telephoto to wide-angle or down (TELE) to go from wide-angle to telephoto. The manual zoom knob can be used to manually zoom the lens at speeds other than that of the power zoom, or it can be used to pre-set the lens before starting to take pictures. You can also put the exposure bar in the continuous run position and then zoom by pushing the power zoom slide.

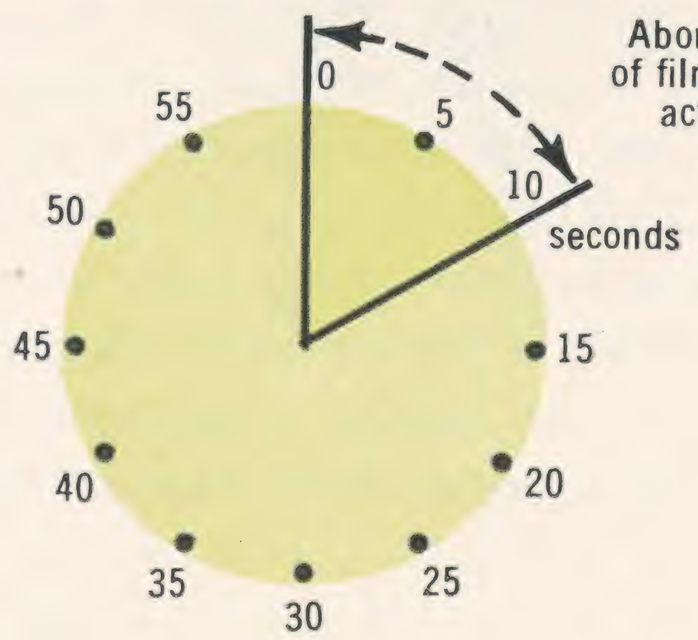


SCENE LENGTH

Usually, about 1 to 2 feet of film is the proper length for average action scenes. This amounts to about 5 to 10 seconds of taking time. Naturally, you will want to make some scenes longer than others – let the length of each be governed by the nature of the subject. For example, a series of landscape shots might well be made longer than scenes which include brief, fast-moving action. Since the camera motor will drive about 14 feet of film at a winding, you can film scenes that will run about one minute without rewinding.

A good way to time a scene is to count slowly and deliberately to yourself, "one and one thousand, two and one thousand, three and one thousand" – etc. You can time scenes with surprising accuracy by this addition of "and one thousand" to each numbered second.





About 1 to 2 feet of film for average action scenes

HINTS ON USING THE EXPOSURE METER

The exposure meter reads the average over-all brightness of the field covered. If the field is evenly illuminated and lacks extreme contrast, the exposure provided by the exposure meter can be used without change. This applies also when the highlight and shadow areas are about the same size and of equal interest value.

Under certain conditions, better pictures are obtained through the use of the exposure-control lock. For example:

1. When you are standing in the sun and taking a picture of a subject in the shade, it's better to step close to the subject and obtain an exposure reading of the light reflected by the subject only. With the camera pointed at the subject, turn the exposure control lock to LOCK. Thus, the correct exposure for just the subject will be obtained. Stand back and take the picture from the position you wish to photograph the subject.

2. When taking a picture of a light subject against a large, dark background or a dark sub-

1



2



ject against a large, bright background, it's best to take the reading at the subject.

Remember to return the control lock to AUTO before filming other scenes.



FILMING TIPS

Hold the camera as still and steady as possible when making movies – let your subject do the moving.

Panning, a term which means "to swing the camera to cover an extended view," should be used only in rare instances. Try to film an extended scene by a series of views; swing the camera between shots, overlapping each scene slightly.

Panning can give unpleasant effects when projected on a screen. The trick is to use a tripod or to plant your feet solidly on the ground and pivot from the waist. Always pan very slowly – a good rule of thumb is to pan twice as slowly as you think you should. *Never pan on nearby objects.*

Sometimes it's necessary to follow the action of a moving object, such as a running child or a racing auto. Try to keep the subject centered in the finder.

Treat zooming with the same caution as panning. A rapid zoom is like a rapid pan – hard on the eyes. Never pan and zoom at the same time.

MOVIE LIGHTS

The Brownie 8 Movie Light can be attached to the socket in the top of the finder cover. Place the washer supplied with the Movie Light under the head of the attaching screw.

You can use automatic movie cameras on a movie light bar quite effectively. You don't have to judge lamp distance. Set the film index indicator to 16 for Kodachrome Color Movie Film, Type A. Picture results are best when the subject is close to a background of medium or light tone.

No allowance need be made for lamp blackening – the exposure meter does it for you.

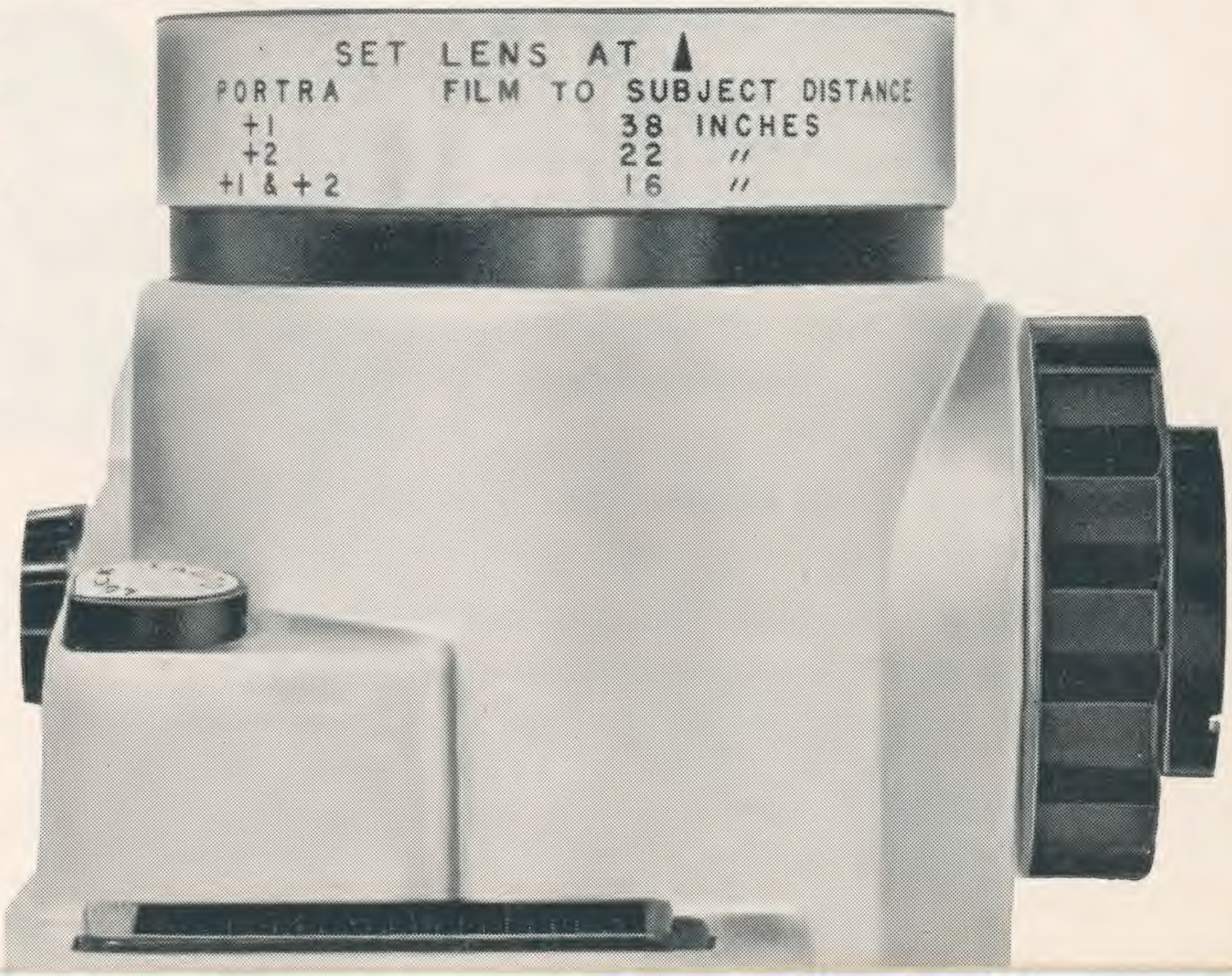


EXTREME CLOSE-UPS

You have the advantage of extreme close-ups. They can be taken by attaching to the camera lens a supplementary lens, such as the Series 7 Kodak Portra Lens 1+ or 2+. You will find these lenses useful for making titles and taking pictures of flowers, insects, coins, models, small machine parts, or any other small objects. Two Portra Lenses can be combined for closer focusing. If they are, the 2+ lens should go next to the camera lens.

The table on the bottom of the lens mount gives the optimum subject distance to be used with the Portra Lenses.

Set Lens at ▲	
Portra Lens	**Optimum Subject Distance in Inches**
1+	38
2+	22
1+ and 2+ combination	16



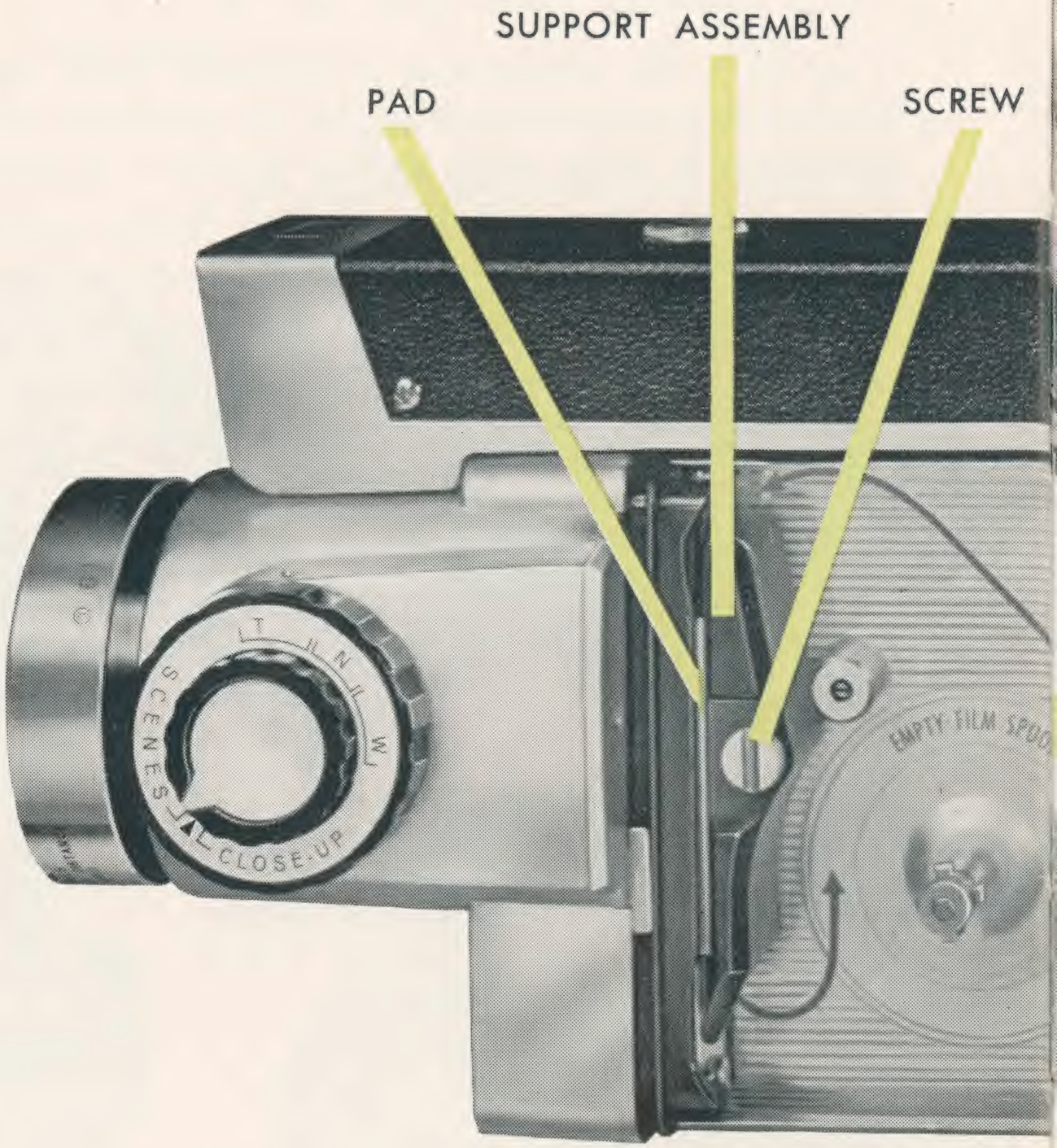
TITLING

With the reflex finder you can see exactly what your title will be; no accessory titler is necessary. If you wish to use the zoom feature of your camera when making titles, it is recommended that the viewfinder be in the telephoto position when you compose your title.

CAMERA CARE

Cleaning the Optics: The lens is built into the camera and cannot be taken out for cleaning. If the optical system needs cleaning, first blow away any dust or grit from the surface; then wipe the surface with a clean, soft, lintless cloth.

Cleaning the Gate: To clean the gate, first remove the film spool from the camera. Loosen the coin-slotted pressure pad support SCREW and lift out the pressure pad SUPPORT ASSEMBLY.

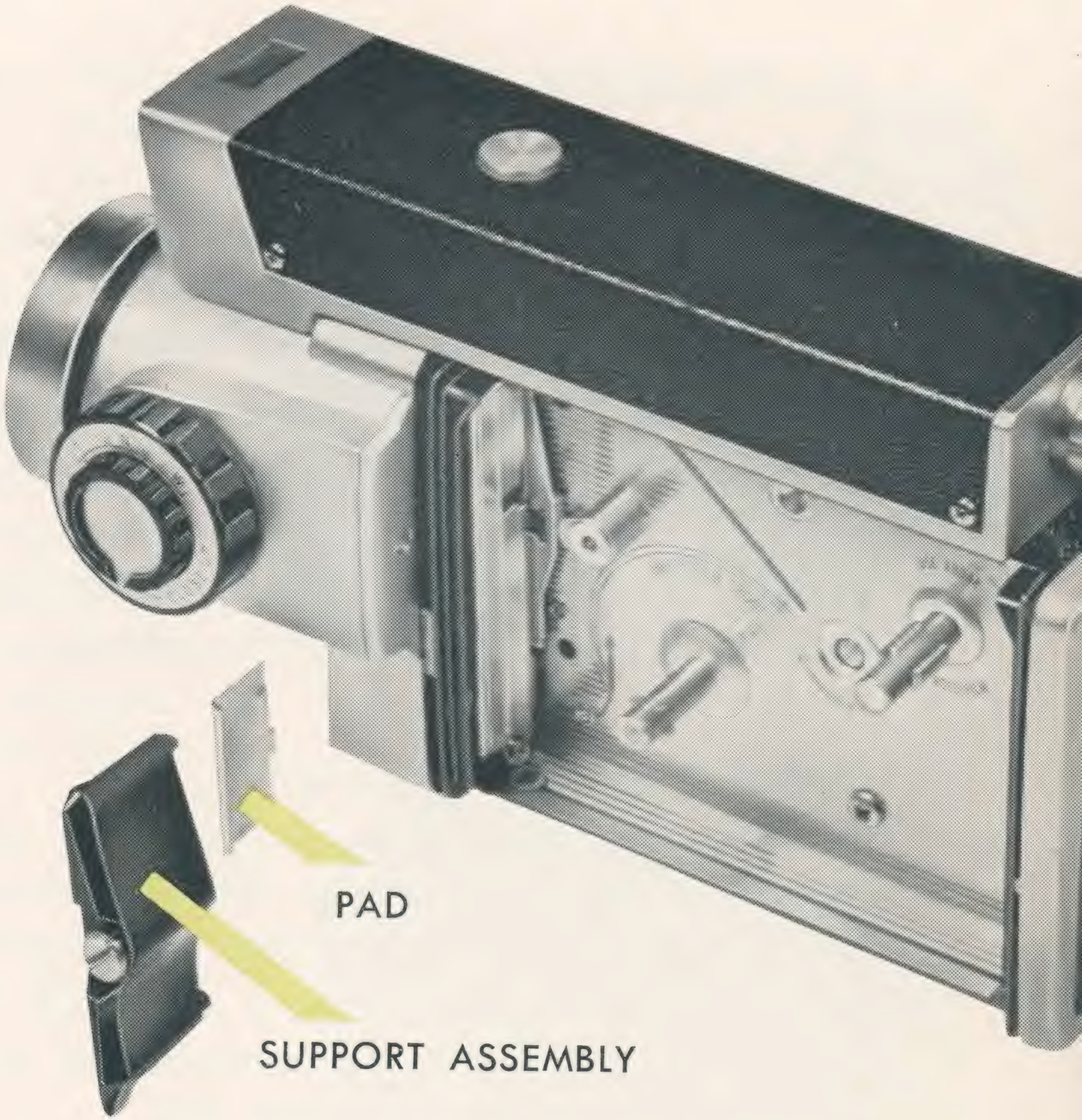


Remove the pressure PAD.

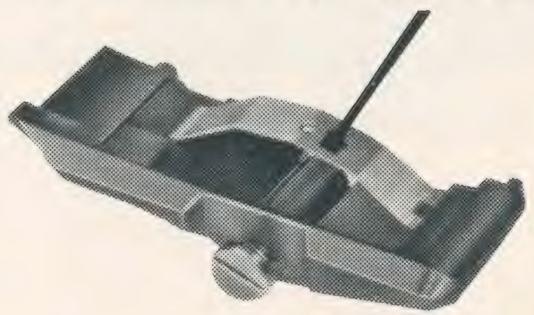
Carefully clean the polished surface of the gate and pressure pad with a slightly moist cloth; do not scrape the track with any metallic object. Then polish the parts with a clean, soft, lintless cloth. Make sure the parts are dry.

Put the pressure pad back in place with the tee fitted into the slot in the bottom of the gate and the rail on the pad facing toward the back of the camera. Carefully replace the pressure pad support assembly (to which is attached the PRESSURE PAD SPRING). Tighten the pressure pad support screw.

Never oil the camera.



PRESSURE PAD SPRING



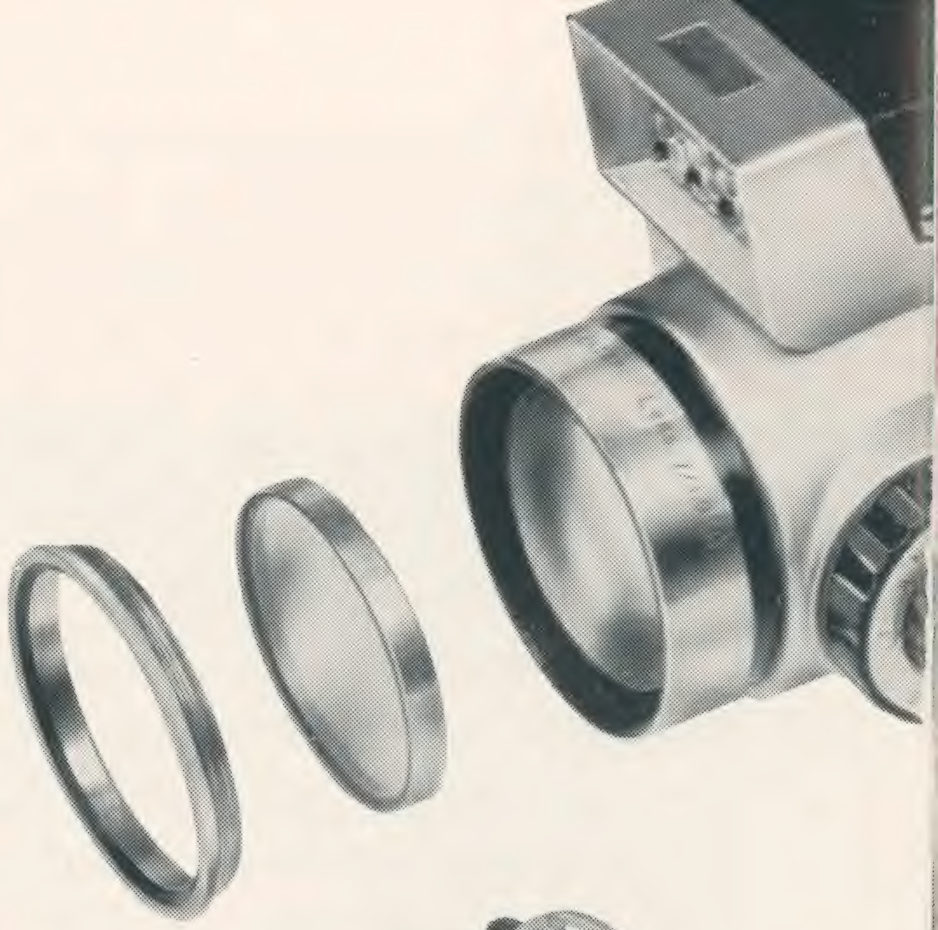
AUXILIARY EQUIPMENT

Serial Number

Each Kodak Zoom 8 Reflex Camera has a serial number stamped on the bottom edge of the back plate. Make a note of this number for your records.

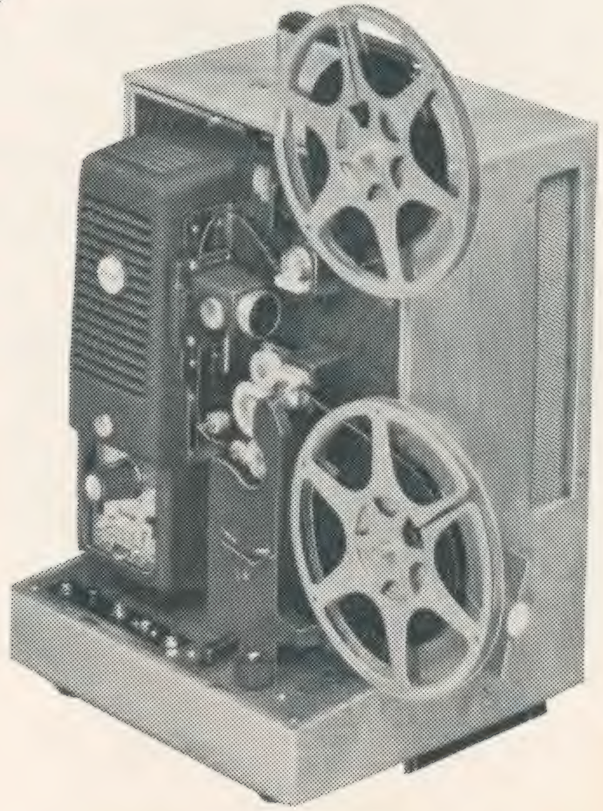
Kodak Combination Lens Attachments

If you wish to use the Kodak Daylight Filter for Kodak Type A Color Films or a Kodak Skylight Filter, a Series 7 Retaining Ring for holding these attachments in place may be obtained from your dealer.



Kodak Sound 8 Projector

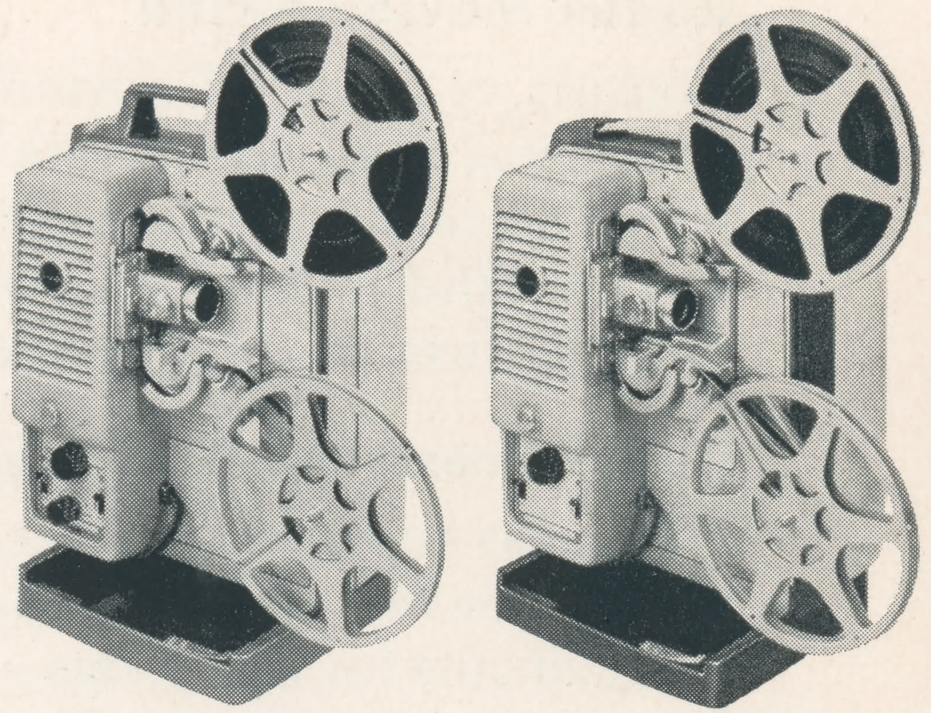
Adds the realism of sound to your old and new 8mm movies. Uses a new 500-watt internal reflector type projection lamp. Has forward and reverse, "stills," and power rewind controls. 16 and 24 frames-per-second projection speeds. 10″ x 2″ oval speaker. Film capacity: 400 feet.



Kodak Cine Showtime Projectors

These projectors feature an automatic threading mechanism and a new high brilliance, 15-hour,

500-watt projection lamp that requires no condenser system. Model A20 is a constant speed model, while Model A30 has a variable speed control. A Kodak Presstape Movie Splicer and one package of ten 8mm Presstapes are supplied with the Model A30. Model A20 has provision for holding a Kodak Presstape Movie Splicer (not supplied).

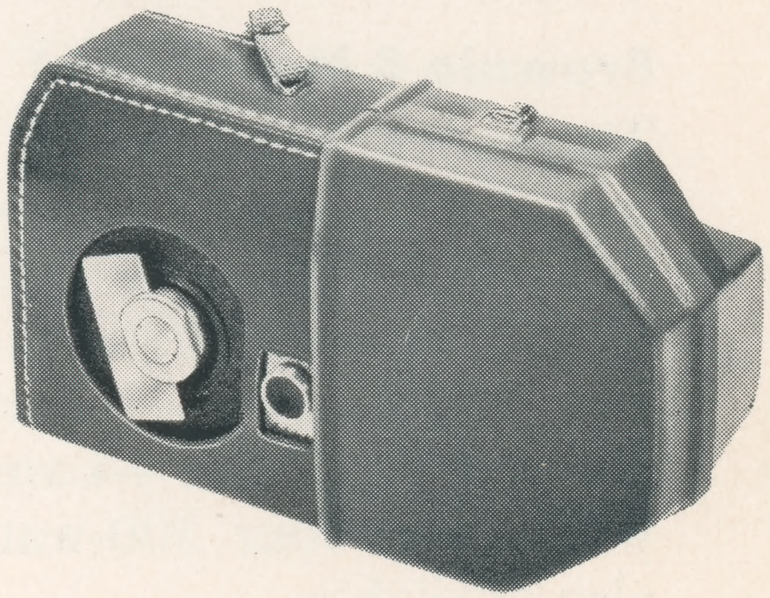


Brownie 500 Movie Projector, Model A-5

Has automatic threading mechanism. All operating controls are on a single panel; a single control is used for forward projection, reverse, still, and rewind. Power rewinding of film without changing belts and reels. Accommodates 400-foot film reel.

Field Case

To protect your camera, order the Kodak Field Case for Kodak Zoom 8 Reflex Camera (Automatic *f*/1.9). To make movies, merely swing the top of the case down.

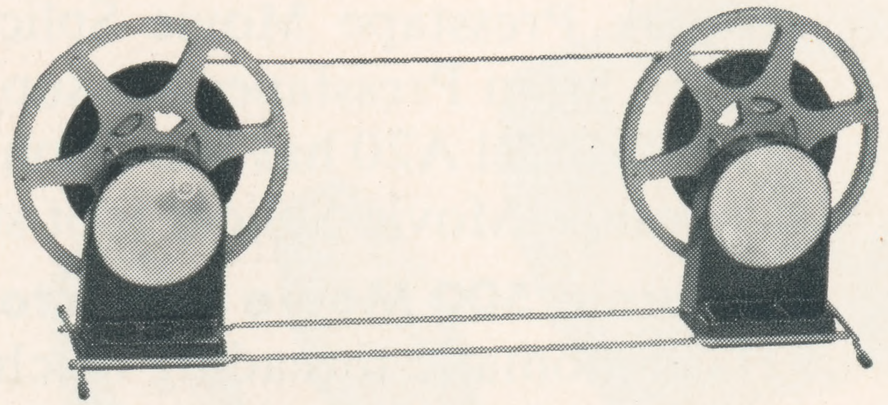


Kodak Projection Screen

An inexpensive, beaded 40 x 40-inch screen of just the right type for home movie showings. Easy to set up and easy to store.

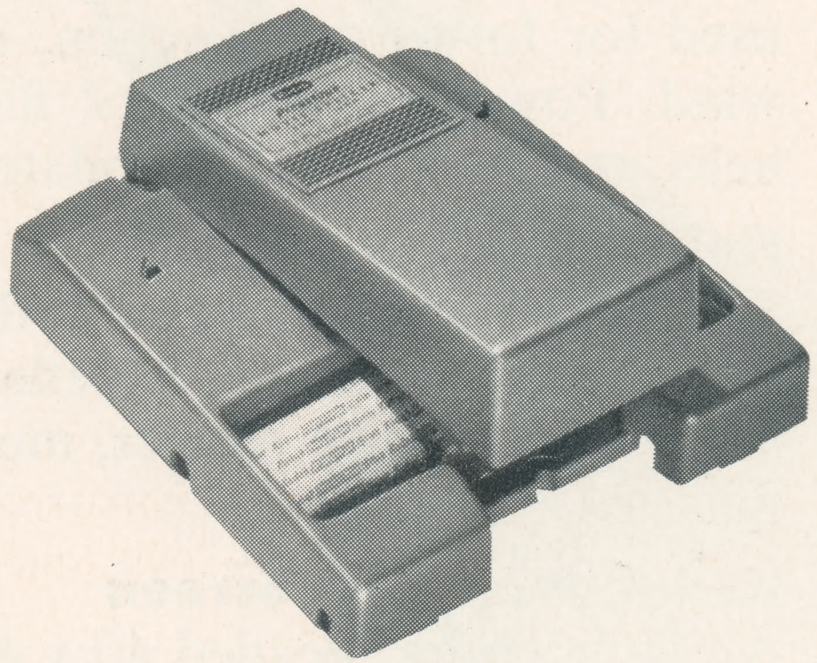
Kodak Movie Rewind

Consists of a pair of rewinds, each of which has a 4 to 1 gear ratio, and a wire bracket into which the rewinds are inserted for use and from which they can be withdrawn for easy storage. Capable of handling all sizes of reels up to and including 400 feet.



Kodak Presstape Movie Splicer

New, easy-to-use dry splicer. Uses a pressure-sensitive adhesive tape to make film splices. Makes notched cuts for butt joints – thin and durable. Can be combined with the Kodak Movie Rewind to make an inexpensive editing outfit.



Brownie 8 Movie Light (Model 1)

This movie light bar can be attached easily to the top of the camera after unscrewing and removing the metal button. Illumination is always on the subject since the light bar moves with the camera. Two 300-watt or 375-watt reflector flood lamps can be used. A Kodak 4-Lamp Movie Light (Model 1) which uses four 300-watt reflector flood lamps is also available.

GUARANTEE

Within a year after purchase, any repairs necessary to this Kodak Zoom 8 Reflex Camera due to a defect in materials or workmanship will be made or, at our option, the camera will be replaced without charge. No other warranty or guarantee, express or implied, shall be applicable to this equipment. Nor are we responsible for loss of film, for other expenses or inconveniences, or for any consequential damages occasioned by the equipment.

In case of unsatisfactory operation, the camera should be sent directly or through a Kodak dealer to Eastman Kodak Company or a repair firm authorized by us to make such repairs. It should be accompanied by a description of the trouble encountered and other available information regarding the camera, including the date and place of purchase.

EASTMAN KODAK COMPANY, Rochester 4, N. Y.

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